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10/011,659	11/29/2001	Eric R. George	ZE-46	6878
7590	03/29/2004		EXAMINER	
Sperry, Zoda & Kane Suite D One Highgate Drive Trenton, NJ 08618			AUGHENBAUGH, WALTER	
		ART UNIT	PAPER NUMBER	7
DATE MAILED: 03/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

*SPM*

## Office Action Summary

Application No.

10/011,659

Applicant(s)

GEORGE ET AL.

Examiner

Walter B Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 08 July 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 42-54 and 56-85 is/are pending in the application.
- 4a) Of the above claim(s) 42-54 and 56-66 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 67-85 is/are rejected.
- 7) Claim(s) 73,85 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Acknowledgement of Applicant's Amendments***

1. The replacement abstract provided on page 6 of the Amendment filed July 8, 2003 (Paper 6) has been received and considered by Examiner.
2. The cancellation of claims 1-41 and 55 in Paper 6 has been acknowledged by Examiner.
3. New claims 67-85 presented in Paper 6 have been received and considered by Examiner.

***Election/Restrictions***

4. Applicant's election of Group I, claims 1-41 and 55 in Paper No. 6 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***WITHDRAWN OBJECTIONS***

5. The objection to the abstract made of record in paragraph 9 of Paper 5 has been withdrawn due Applicant's amendments to the abstract in Paper 6.
6. The objection to claims 16-20 made of record in paragraph 10 of Paper 5 has been withdrawn due Applicant's cancellation of claims 16-20 in Paper 6.

***WITHDRAWN REJECTIONS***

7. The 35 U.S.C. 112 rejection of claims 1, 4-9, 13, 15-23, 27, 33-35, 40 and 55 made of record in paragraph 12 of Paper 5 has been withdrawn due to Applicant's cancellation of claims 1, 4-9, 13, 15-23, 27, 33-35, 40 and 55 in Paper 6.

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8. The 35 U.S.C. 103 rejections of claims 1-41 and 55 made of record in paragraphs 14-20 of Paper 5 have been withdrawn due to Applicant's cancellation of claims 1-41 and 55 in Paper 6.

#### ***NEW OBJECTIONS***

##### ***Claim Objections***

9. Claims 73 and 85 are objected to because of the following informalities: does Applicant intend to recite "said block copolymer comprises a plastic material" as in claims 73 and 85, or should this be the other way around? Appropriate correction is required.

#### ***NEW REJECTIONS***

##### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 67, 74 and 79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regard to claims 67, 74 and 79, what is the basis of the percentage in "1 to 90%"? (% by weight? By volume?) In regard to claim 67, the modulus and toughness is "increased" compared to what? In regard to the last two lines of claims 74 and the last line of claim 79, to which of the materials is being referred (in regard to claim 74, the first or the second material? in regard to claim 79, the polymer material or the block copolymer material?). In regard to claim 79, "one of the blocks in the block copolymer is similar chemically but has a different crystalline form" than what?

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 67, 68, 71-80 and 83-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bagaoisan et al. in view of Beall et al.

In regard to claim 67, Bagaoisan et al. teach tubing (item 16, Fig. 1 and 4) having an internal diameter of about 0.10 inches (col. 3, lines 59-64 and col. 5, lines 26-40). Bagaoisan et al. teach that the tubing is formed from a blend of nylon and Pebax (TM) copolymer (col. 3, lines 6-8) and that different materials are blended to select for desirable flexibility properties (col. 9, lines 12-20). Bagaoisan et al. teach that Pebax (TM) is a polyether block amide (col. 4, line 54). The nylon taught by Bagaoisan et al. therefore corresponds to the "polymer in the polymer nanocomposite material" as claimed by Applicant, and the Pebax (TM) polyether block amide corresponds to the block copolymer as claimed by Applicant. Pebax (TM) is used to designate a group of nylon/polyether copolymers as evidenced by Applicant's specification (page 19, lines

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25-26); Bagaoisan et al. therefore teach that one of the blocks in the block copolymer (i.e. the nylon block) is identical chemically and has the same crystalline form as the polymer in the polymer nanocomposite material.

Bagaoisan et al. fail to teach that the nylon polymer is a nanocomposite polymer, thus resulting in a reinforced polymer blend, and fail to explicitly teach that the polymer nanocomposite material is blended with 1 to 90% of the block copolymer.

Beall et al., however, disclose a matrix polymer/platelet nanocomposite (col. 1, lines 65-66) material for use where it is desired to alter one or more physical properties of a matrix polymer, such as elasticity characteristics (col. 1, lines 33-43). Beall et al. disclose that nanoscale platelet particles of high strength and modulus dispersed throughout a polymer matrix imparts greater mechanical reinforcement to the polymer matrix than do comparable loadings of conventional reinforcing fillers of micron-scale size (col. 6, lines 32-39). Beall et al. disclose that nylons are useful as the matrix polymer (col. 18, lines 28-37). Therefore, one of ordinary skill in the art would have recognized to have blended the nanoscale platelet particles of Beall et al. with the nylon polymer of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymer matrix of Bagaoisan et al. and to form a nanocomposite polymer, as taught by Beall et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have blended the nanoscale platelet particles of Beall et al. with the nylon polymer of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymer matrix of Bagaoisan et al. and to form a nanocomposite polymer, as taught by Beall et al.

In further regard to claim 67, since Bagaoisan et al. teach that different materials are blended to select for desirable flexibility properties (col. 9, lines 12-20), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the relative amounts of polymer nanocomposite material and block copolymer in the blend to achieve the desired flexibility properties of the blend depending on the particular desired end result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The recitation “subsequently extruded into” is a method limitation that has not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself. The tubing taught by Bagaoisan et al. and Beall et al. necessarily has increased modulus and toughness as claimed by Applicant, and “a balance” is necessarily “provid[ed] therebetween” as claimed by Applicant, because the claimed structural and compositional limitations that provide the increased modulus and toughness, and “a balance therebetween”, as claimed by Applicant, are taught by Bagaoisan et al. and Beall et al.

In regard to claim 68, Beall et al. disclose that nylon 12 is a preferred matrix polymer for the polymer nanocomposite material (col. 18, lines 38-39). Claims 71 and 72 consist entirely of method limitations that have not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself. The block copolymer taught by Bagaoisan et al. necessarily (i.e. by definition) meets the limitations of claim 73.

In regard to claim 74, Bagaoisan et al. teach the tubing as discussed above. Bagaoisan et al. teach that blends of nylons are suitable materials for use in forming the tubing and that materials are blended to select for desirable flexibility properties (col. 9, lines 15-20). Since

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nylons are blended as taught by Bagaoisan et al., these nylons necessarily are similar chemically (because they are nylons) but are of different crystalline forms because two nylons that are blended together necessarily have different chemical structures and therefore form different crystalline forms.

Bagaoisan et al. fail to teach that the two nylons that are blended together are both nanocomposite polymers, thus resulting in a reinforced polymer blend, and fail to explicitly teach that the first nanocomposite polymer material is blended with 1 to 90% of the second nanocomposite polymer material.

Beall et al., however, disclose a matrix polymer/platelet nanocomposite (col. 1, lines 65-66) material for use where it is desired to alter one or more physical properties of a matrix polymer, such as elasticity characteristics (col. 1, lines 33-43). Beall et al. disclose that nanoscale platelet particles of high strength and modulus dispersed throughout a polymer matrix imparts greater mechanical reinforcement to the polymer matrix than do comparable loadings of conventional reinforcing fillers of micron-scale size (col. 6, lines 32-39). Beall et al. disclose that nylons such as nylon 6, nylon 11 and nylon 12 and copolyamides (col. 17, line 57-col. 18, line 12) are useful as the matrix polymer (col. 18, lines 28-37). Therefore, one of ordinary skill in the art would have recognized to have blended the nanoscale platelet particles of Beall et al. with the nylon polymers of the blend of nylon polymers of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymers of the blend of nylon polymers of Bagaoisan et al. as taught by Beall et al. to form a reinforced nanocomposite polymer blend.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have blended the nanoscale platelet particles of Beall et al. with the nylon polymers

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of the blend of nylon polymers of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymers of the blend of nylon polymers of Bagaoisan et al. as taught by Beall et al.

In further regard to claim 74, since Bagaoisan et al. teach that different materials are blended to select for desirable flexibility properties (col. 9, lines 12-20), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the relative amounts of the first nanocomposite polymer material and the second nanocomposite polymer material copolymer in the blend to achieve the desired flexibility properties of the blend depending on the particular desired end result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The recitation “subsequently being extruded into” is a method limitation that has not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself. The tubing taught by Bagaoisan et al. and Beall et al. necessarily has “a unique balance between modulus and ductility while simultaneously exhibiting an unexpectedly high modulus and increased dimensional stability when compared with extrusions of the pure nanocomposite polymer material” as claimed by Applicant because the claimed structural and compositional limitations that provide the quoted limitations claimed by Applicant are taught by Bagaoisan et al. and Beall et al.

In regard to claims 75 and 76, Beall et al. disclose that nylon 6 and nylon 12 are suitable matrix polymers for the polymer nanocomposite material (col. 18, lines 28-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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have used nylon 6 as the polymer of the first nanocomposite polymer material taught by Bagaoisan et al. and Beall et al., and to have used nylon 12 as the polymer of the second nanocomposite polymer material taught by Bagaoisan et al. and Beall et al., since nylon 6 and nylon 12 are notoriously well known suitable polymer matrix materials for a matrix polymer/platelet nanocomposite as taught by Beall et al.

Claims 77 and 78 consist entirely of method limitations that have not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself.

In regard to claim 79, Bagaoisan et al. teach the tubing formed from a blend of a nylon and a nylon/polyether Pebax (TM) copolymer as discussed above. Since Bagaoisan et al. teach a blend of a nylon and a nylon/polyether copolymer as discussed above, Bagaoisan et al. teach that one of the blocks in the block copolymer is similar chemically but has a different crystalline form than the nylon of the nylon polymer (i.e. the condition where the nylon and the nylon of the nylon/polyether copolymer are different nylons falls within the scope of the teaching of Bagaoisan et al. that the tubing is formed from a blend of a nylon and a nylon/polyether copolymer); two different nylons are similar chemically but have different chemical structures and therefore form different crystalline forms.

Bagaoisan et al. fail to teach that the nylon polymer and the block copolymer are both nanocomposite polymers, thus resulting in a reinforced polymer blend, and fail to explicitly teach that the nanocomposite polymer material is blended with 1 to 90% of the block nanocomposite copolymer material.

Beall et al., however, disclose a matrix polymer/platelet nanocomposite (col. 1, lines 65-66) material for use where it is desired to alter one or more physical properties of a matrix polymer, such as elasticity characteristics (col. 1, lines 33-43). Beall et al. disclose that nanoscale platelet particles of high strength and modulus dispersed throughout a polymer matrix imparts greater mechanical reinforcement to the polymer matrix than do comparable loadings of conventional reinforcing fillers of micron-scale size (col. 6, lines 32-39). Beall et al. disclose that nylons such as nylon 6, nylon 11 and nylon 12 and copolyamides (col. 17, line 57-col. 18, line 12) are useful as the matrix polymer (col. 18, lines 28-37). Therefore, one of ordinary skill in the art would have recognized to have blended the nanoscale platelet particles of Beall et al. with the nylon polymer and the nylon/polyether copolyamide of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymer and the nylon/polyether copolyamide of Bagaoisan et al. to form nanocomposite polymers, as taught by Beall et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have blended the nanoscale platelet particles of Beall et al. with the nylon polymer and the nylon/polyether copolyamide of Bagaoisan et al. in order to impart superior mechanical reinforcement to the nylon polymer and the nylon/polyether copolyamide of Bagaoisan et al. to form nanocomposite polymers, as taught by Beall et al.

In further regard to claim 79, since Bagaoisan et al. teach that different materials are blended to select for desirable flexibility properties (col. 9, lines 12-20), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the relative amounts of the nanocomposite polymer material and the block nanocomposite copolymer material in the blend to achieve the desired flexibility properties of the blend

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depending on the particular desired end result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The recitation “subsequently extruded into” is a method limitation that has not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself. The tubing taught by Bagaoisan et al. and Beall et al. necessarily has “a unique balance between modulus and ductility while exhibiting an unexpectedly high modulus and exhibiting improved dimensional stability when compared with extrusions of the pure nanocomposite polymer” as claimed by Applicant because the claimed structural and compositional limitations that provide the quoted limitations claimed by Applicant are taught by Bagaoisan et al. and Beall et al.

In regard to claim 80, Beall et al. disclose that nylon 6 is a suitable matrix polymer for the nanocomposite polymer material (col. 18, lines 28-33). Claims 83 and 84 consist entirely of method limitations that have not been given patentable weight since the method of forming the tubing is not germane to the issue of patentability of the tubing itself. The block copolymer taught by Bagaoisan et al. necessarily (i.e. by definition) meets the limitations of claim 85.

14. Claims 69, 70, 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bagaoisan et al. in view of Beall et al., and in further view of Tse et al.

Bagaoisan et al. and Beall et al. teach the tubing comprising the nylon/polyether block copolymer as discussed above. Bagaoisan et al. and Beall et al. fail to explicitly teach that the nylon of the nylon/polyether block copolymer is nylon 12. Tse et al., however, teach that nylon 12 is a suitable polyamide for use in polyether/polyamide block (Pebax, TM) copolymers (col. 3,

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line 67-col. 4, line 14). Therefore, one of ordinary skill in the art would have recognized to have used nylon 12 as the nylon of the nylon/polyether block copolymer of Bagaoisan et al., since nylon 12 is notoriously well known to be a suitable polyamide for a polyamide/polyether block copolymer as taught by Tse et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used nylon 12 as the nylon of the nylon/polyether block copolymer of Bagaoisan et al., since nylon 12 is notoriously well known to be a suitable polyamide for a polyamide/polyether block copolymer as taught by Tse et al.

#### ***ANSWERS TO APPLICANT'S ARGUMENTS***

15. While Examiner has considered Applicant's remarks made on pages 8-10 of Paper 6, no arguments were presented in Paper 6.

16. Examiner notes that Applicant claims unexpected results in claims 74 and 79. However, Applicant has not met the burden on Applicant to establish that these results are unexpected and significant in that the evidence relied upon does not establish "that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance" *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Furthermore, the claimed invention has not been compared with the closest prior art which is commensurate in scope with the claims as required by MPEP 716.02(b).

#### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh

03/08/04

WBA

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  


3/8/04

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**APPENDIX TO FINAL REJECTION COMPLETED MARCH 8, 2004**

Please note that Amendment Practice has changed as of July 30, 2003. Please see the attached "Revised Amendment Practice" flyer which follows this page, especially the examples provided under section A on page 2 of the flyer and also section A, subsection 6 which states "Consecutive canceled, or not entered, claims may be aggregated into one statement."

Walter B. Aughenbaugh

03/08/04

*WBA*

**REVISED AMENDMENT PRACTICE: 37 CFR 1.121 CHANGED  
COMPLIANCE IS MANDATORY - Effective Date: July 30, 2003**

All amendments filed on or after the effective date noted above must comply with revised 37 CFR 1.121. See Final Rule: **Changes To Implement Electronic Maintenance of Official Patent Application Records** (68 Fed. Reg. 38611 (June 30, 2003), posted on the Office's website at: <http://www.uspto.gov/web/patents/ifw/>) with related information. The amendment practice set forth in revised 37 CFR 1.121, and described below, replaces the voluntary revised amendment format available to applicants since February 2003. **NOTE: STRICT COMPLIANCE WITH THE REVISED 37 CFR 1.121 IS REQUIRED AS OF THE EFFECTIVE DATE (July 30, 2003).** The Office will notify applicants of amendments that are not accepted because they do not comply with revised 37 CFR 1.121 via a Notice of Non-Compliant Amendment. See MPEP 714.03 (Rev. 1, Feb. 2003). The non-compliant section(s) will have to be corrected and the entire corrected section(s) resubmitted within a set period.

**Bold underlined italic font has been used below to highlight the major differences between the revised 37 CFR 1.121 and the voluntary revised amendment format that applicants could use since February, 2003.**

Note: The amendment practice for reissues and reexamination proceedings, except for drawings, has not changed.

**REVISED AMENDMENT PRACTICE**

**I. Begin each section of an amendment document on a separate sheet:**

Each section of an amendment document (e.g., Specification Amendments, Claim Amendments, Drawing Amendments, and Remarks) must begin on a separate sheet. Starting each separate section on a new page will facilitate the process of separately indexing and scanning each section of an amendment document for placement in an image file wrapper.

**II. Two versions of amended part(s) no longer required:**

37 CFR 1.121 has been revised to **no longer require** two versions (a clean version and a marked up version) of each replacement paragraph or section, or amended claim. Note, however, the requirements for a clean version and a marked up version for **substitute specifications** under 37 CFR 1.125 have been retained.

**A) Amendments to the claims:**

Each amendment document that includes a change to an existing claim, cancellation of a claim or submission of a new claim, **must include a complete listing** of all claims in the application. After each claim number in the listing, the status must be indicated in a parenthetical expression, and the text of each pending claim (with markings to show **current** changes) must be presented. The claims in the listing will replace all prior claims in the application.

- (1) The current status of all of the claims in the application, including any previously canceled, not entered or withdrawn claims, must be given in a parenthetical expression following the claim number using only one of the following seven status identifiers: (original), (currently amended), (canceled), (withdrawn), (new), (**previously presented**) and (**not entered**). The text of all pending claims, **including withdrawn claims**, must be submitted each time any claim is amended. Canceled **and not entered** claims must be indicated by only the claim number and status, without presenting the text of the claims.
- (2) The text of all claims **being currently amended** must be presented in the claim listing with markings to indicate the changes that have been made relative to the immediate prior version. The changes in any amended claim must be shown by underlining (for added matter) or strikethrough (for deleted matter) with 2 exceptions: (1) for **deletion of five characters or fewer, double brackets may be used (e.g., [[eroor]])**; and (2) if strikethrough cannot be easily perceived (e.g., deletion of the number "4" or certain punctuation marks), double brackets must be used (e.g., [[4]]). As an alternative to using double brackets, however, extra portions of text may be included before and after text being deleted, all in strikethrough, followed by including and underlining the extra text with the desired change (e.g., **number 4 as number 14 as**). An accompanying clean version is not required and should not be presented. Only claims of the status "currently amended," and "withdrawn" that are being amended, may include markings.
- (3) The text of pending claims **not being currently amended**, **including withdrawn claims**, must be presented in the claim listing in clean version, i.e., without any markings. Any claim text presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version except to omit markings that may have been present in the immediate prior version of the claims.

- (4) A claim being canceled must be listed in the claim listing with the status identifier “canceled”; the text of the claim must not be presented. Providing an instruction to cancel is optional.
- (5) Any claims added by amendment must be presented in the claim listing with the status identifier “(new)”; the text of the claim must not be underlined.
- (6) All of the claims in the claim listing must be presented in ascending numerical order. Consecutive canceled, or not entered, claims may be aggregated into one statement (e.g., Claims 1 – 5 (canceled)).

**Example of listing of claims (use of the word “claim” before the claim number is optional):**

Claims 1-5 (canceled)

Claim 6 (previously presented): A bucket with a handle.

Claim 7 (withdrawn): A handle comprising an elongated wire.

Claim 8 (withdrawn): The handle of claim 7 further comprising a plastic grip.

Claim 9 (currently amended): A bucket with a ~~green~~ blue handle.

Claim 10 (original): The bucket of claim 9 wherein the handle is made of wood.

Claim 11 (canceled)

Claim 12 (not entered)

Claim 13 (new): A bucket with plastic sides and bottom.

**B) Amendments to the specification:**

Amendments to the specification, including the abstract, must be made by presenting a replacement paragraph or section or abstract marked up to show changes made relative to the immediate prior version. An accompanying clean version is not required and should not be presented. Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined. A replacement or new abstract must be submitted on a separate sheet, 37 CFR 1.72. If a substitute specification is being submitted to incorporate extensive amendments, both a clean version (which will be entered) and a marked up version must be submitted as per 37 CFR 1.125.

The changes in any replacement paragraph or section, or substitute specification must be shown by underlining (for added matter) or strikethrough (for deleted matter) with 2 exceptions: (1) for deletion of five characters or fewer, double brackets may be used (e.g., [[error]]); and (2) if strikethrough cannot be easily perceived (e.g., deletion of the number “4” or certain punctuation marks), double brackets must be used (e.g., [[4]]). As an alternative to using double brackets, however, extra portions of text may be included before and after text being deleted, all in strikethrough, followed by including and underlining the extra text with the desired change (e.g., number 4 as number 14 as)

**C) Amendments to drawing figures:**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be accompanied by a marked-up copy of one or more of the figures being amended, with annotations. Any replacement drawing sheet must be identified in the top margin as “Replacement Sheet” and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. Any marked-up (annotated) copy showing changes must be labeled “Annotated Marked-up Drawings” and accompany the replacement sheet in the amendment (e.g., as an appendix). The figure or figure number of the amended drawing(s) must not be labeled as “amended.” If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Questions regarding the submission of amendments pursuant to the revised practice set forth in this flyer should be directed to: Elizabeth Dougherty or Gena Jones, Legal Advisors, or Joe Narcavage, Senior Special Projects Examiner, Office of Patent Legal Administration, by e-mail to [patentpractice@uspto.gov](mailto:patentpractice@uspto.gov) or by phone at (703) 305-1616.